

The Spleen not Taken: Differences in Management and Outcomes of blunt splenic injury in teenagers cared for by Adult and Pediatric trauma teams in a Single institution

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Disclosures

- We have nothing to disclose

Wake Forest Baptist Trauma services

- Brenner's Children's Hospital
 - Level 1 trauma center for children <16 years old
- WFBMC
 - Level 1 trauma center for ≥ 16 years old

Splenic trauma protocols

□ Pediatric

- All Stable patients, regardless of grade, are admitted for Serial abdominal exams, Hemodynamic monitoring and Serial CBC

□ Adult

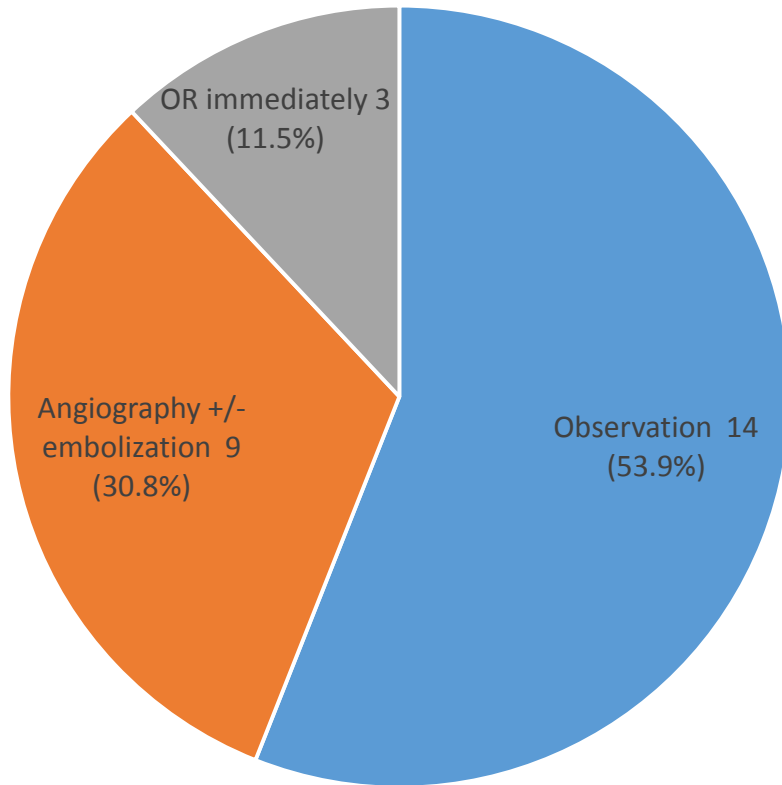
- Stable Grade I-II are admitted for Serial Abdominal exams, Hemodynamic monitoring and Serial CBC
- All Stable patients with Grade III or higher get IR consult
- Miller et al, 2014: decreased failure rate of NOM from 15 to 5%

Our question?

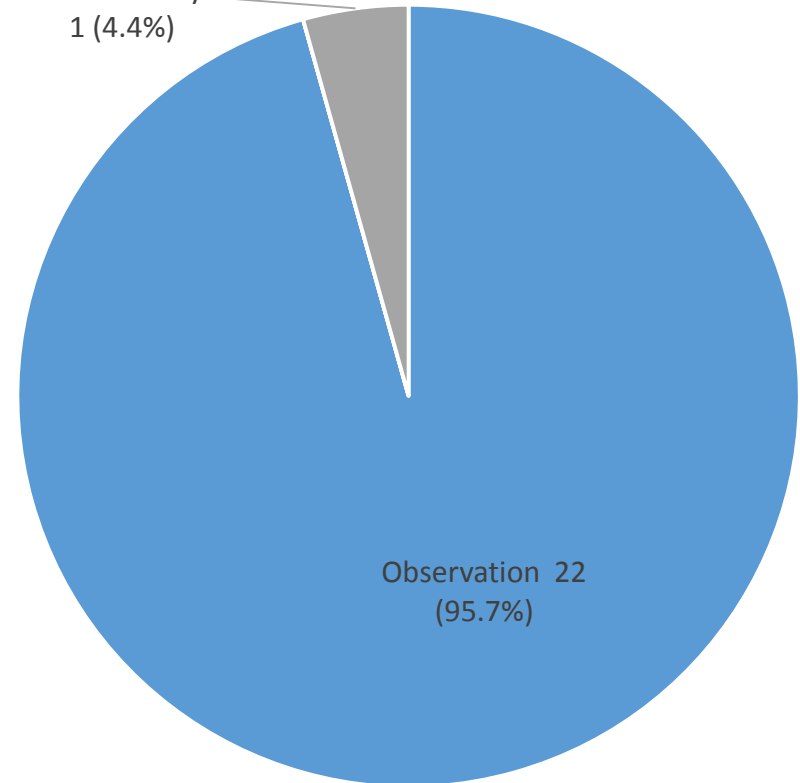
- Does the routine use of IR angiography reduce the failure rate of Non Operative Management in Adolescents?
- Methods
 - Retrospective review from 2007-2014 trauma data base of 15 and 16 year olds with blunt splenic trauma

Treatment Groups

Adult Service (N=26)



OR immediately 1 (4.4%)
Pediatric Service (N=23)



Significant difference in treatment (P= .003)

Severity of Injury

	Average age (years)	Average Grade	Extravasation seen on CT	Pseudoaneurysm on CT	ISS score
Adult Service (N=23)	16.43	2.74	2 8.70%	4 17.40%	24.3
Pediatric Service (N=22)	15.46	2.54	3 13.60%	4 18.18%	23.64
P value		0.688	0.598	0.9447	0.608

Outcomes

	Delayed Splenectomy	30 day mortality	# of Units PRBC	ICU days	LOS
Adult Service (N=23)	3 13.64%	1 3.85%	1.72	5.14	10.23
Pediatric Service (N=22)	0 0.00%	2 8.70%	1.22	3.52	10.26
P value	0.079	0.524	0.628	0.414	0.918

Discussion

- Adolescents are treated by different protocols with no improvement in outcomes
- Routine use of IR angiography was not associated with improved failure rates of NOM in Adolescents
- At what age does IR begin to improve outcomes?

Discussion continued

- Retrospective, non randomized with small number of patients
- 3/9 patients underwent angiography without embolization- all risk and no therapeutic benefit